

**REMARKS/ARGUMENTS**

Claims 1-68 were pending of which Claims 1-68 were rejected. Claims 18 and 52 have been amended.

Claim 18 has been amended to recite "wherein each stick belongs to only one region." This amendment is supported by at least the Specification in Paragraph [0033] which recites "if one or more pixels in the stick are classified as belonging to a particular region, then those pixels will be assigned to the same region."

Claim 52 has been amended to recite ""wherein each stick belongs to only one region." and is likewise supported by at least the specification in Paragraph [0033]. Furthermore, Claim 52 has been amended to includes "means for" to correct obvious and inadvertent clerical errors.

No new Matter is added in this amendment.

Claim Rejections - 35 U.S.C. §102

Claims 1-7, 18-24, 35-51, and 52-58 were rejected under 35 U.S.C. §102(e) as being anticipated by Bechelder (US. 6,993,177B1).

With respect to Claim 1, the Examiner stated that

Bechelder discloses a method of segmenting an image having a plurality of pixels (abstract) comprising: dividing the image into a plurality of sticks of pixels (note, gauge point could be stick pixel, fig. 1, 12) wherein each stick contains at least two pixels (note, gauge entities or gauge points are defined by the user with the cursor in a graphical user interface, column 7, lines 53-64); determining whether each stick belongs to any region from a set of region (fig 2, 22,24 and 26 29, column 8m, lines 18-27); and classifying each stick that belongs to any region as belonging to a

specific region of the set of regions  
(column 8, lines 29-40).

Applicant respectfully submits that the Examiner's interpretation of Bechelder as anticipating Claim 1 is in error. Specifically, Claim 1 recites "dividing the image into a plurality of sticks of pixels". However, in Bechelder "the training image or CAD model includes gauge points or entities whose location is to be measured" (Bechelder, Col. 7, lines 56-58). Furthermore, the "gauge points or entities are defined by the user during a gauge entity definition step 12 which usually occurs at set up time or training time." Thus rather than "dividing the image into a plurality of sticks" as recited in Claim 1, Bechelder teaches to define the gauge points or entities that are in the training image. Therefore, Applicant respectfully submits that Bechelder does not teach or suggest "dividing the image into a plurality of sticks" as recited in Claim 1.

Furthermore, even if the gauge points were interpreted as sticks, Applicant respectfully submits that Bechelder does not teach or suggest "determining whether each stick belongs to any region from a set of regions" as recited in Claim 1. Specifically, Applicant respectfully submits that Bechelder teaches "a region definition step 22 is performed during which a set of regions is defined for each gauge point or entity." (Bechelder, Col. 8, lines 19-21) (emphasis added) (see also Fig. 7 and the description at Col. 9, lines 53-58). Thus, in Bechelder there would be no reason for "determining whether each stick belongs to any region" as recited in Claim 1, because Bechelder teaches to define a set of regions for each gauge point.

In addition, because Bechelder teaches to "a region definition step 22 is performed during which a set of regions is defined for each gauge point or entity." (Bechelder, Col. 8, lines

19-21) (emphasis added), Bechelder would not need to perform "classifying each stick that belongs to any region as belonging to a specific region" because the regions are defined for the gauge points. Therefore, Applicant respectfully submit that Bechelder does not teach or suggest "classifying each stick that belongs to any region as belonging to a specific region" as recited in Claim 1.

Thus, Applicants respectfully submit that Claim 1 is patentable over Bechelder. Reconsideration and withdrawal of this rejection is respectfully requested. Claims 2-17 depend from Claim 1 and are, therefore, likewise patentable.

Furthermore, Applicant respectfully submits that Claim 5 is patentable in its own right. Specifically, Claim 5 recites "determining whether any pixel of a current stick belongs to any region" and "classifying the current stick as belonging to any region when any pixel of the current stick belongs to any region." The Examiner cited Bechelder Col. 10, lines 38-48 with respect to Claim 5. However Applicant finds no teaching in the cited portion that bears any reasonable relationship with Claim 5. Applicant respectfully request clarification from the Examiner in light of the following argument. Specifically, as explained above, Bechelder teaches to define regions for the gauge points. Thus, Bechelder has no reason and thus does not teach or suggest "determining whether any pixel of a current stick belongs to any region" and "classifying the current stick as belonging to any region" as recited in Claim 5. Thus, Applicant respectfully submits that Claim 5 is patentable in its own right in addition to the reasons given above with respect to Claim 1.

Claim 18, was rejected for the same reasons as Claim 1. Claim 18 includes all the limitations of Claim 1. Thus, Applicant respectfully submit that Claim 18 is patentable for at least the

reasons given above with respect to Claim 1. In addition to the limitations of Claim 1, Claim 18 has been amended to recite "wherein each stick belongs to only one region." Applicant respectfully submits that Bechelder teaches "Bechelder teaches "a region definition step 22 is performed during which a set of regions is defined for each gauge point or entity." (Bechelder, Col. 8, lines 19-21) (emphasis added). Thus, Applicant respectfully submit that the gauge points of Bechelder, which the Examiner equated to the "sticks" of the claims belong to more than one region; and thus Teaches away from Claim 18. Accordingly, Applicant respectfully submits that Claim 18 is patentable over Bechelder. Reconsideration and withdrawal of this rejection is respectfully requested. Claims 19-34 depend from Claim 18 and are, therefore, likewise patentable.

Furthermore Applicant respectfully submit that Claim 22, which adds the same limitations as Claim 5 is patentable in its own right for the reasons given above with respect to Claim 5.

With regards to Claim 35, the Examiner cited the reasons for rejection presented for Claim 1. Claim 35 is the means plus function equivalent to Claim 1. Thus, Applicant respectfully submits that Claim 35, is patentable for the same reasons as given above with respect to Claim 1. Reconsideration and withdrawal of this rejection is respectfully requested. Claims 36-51 depend from Claim 34 and are, therefore, likewise patentable.

Furthermore Applicant respectfully submit that Claim 39, which adds the "means plus function" limitations equivalent to Claim 5 is patentable in its own right for the reasons given above with respect to Claim 5.

With regards to Claim 52, the Examiner cited the reasons for rejection presented for Claim 1. Claim 52 is the means plus function equivalent to Claim 35. Thus, Applicant respectfully

submits that Claim 52, is patentable for the same reasons as given above with respect to Claim 35. Reconsideration and withdrawal of this rejection is respectfully requested. Claims 33-68 depend from Claim 52 and are, therefore, likewise patentable.

Furthermore Applicant respectfully submit that Claim 56, which adds the "means plus function" limitations equivalent to Claim 5 is patentable in its own right for the reasons given above with respect to Claim 5.

#### Claim Rejections - 35 U.S.C. §103

Claims 8-17, 26-34, 43-51, and 60-68 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bachelder (US. 6,993,177 B1), as applied to Claims 1-7, 18-24, 35-51 and 52-58 above and further in view of Bolza-Schunemann et al., (US 5,384,859). As explained above, Bechelder does not teach or suggest the limitations of Claims 1, 18, 35, and 52. Thus Applicants respectfully submit that Claims 8-17, which depend on Claim 1; Claims 26-34, which depend from Claim 18; Claims 43-51, which depend form Claim 35, and Claims 60-68, which depend from Claim 52; are patentable for the reasons given above.

Furthermore, Applicant respectfully submits that Claim 11 is also patentable in its own right. Specifically, Claim 11 recites

determining whether any member of a set of previously process sticks belong to any region

assigning an earliest region identifier of a set of previously processed sticks to the current stick when a member of the set of previously processed stick belongs to any region and the current stick belongs to any region; and

assigning a new region identifier to the current stick when the current stick belongs to any region and no member of the set of previously processed sticks belong to any region.

With respect to Claim 11, the Examiner cited Bolza-Schunemann et al. Col. 5 lines 58 to Col. 6 line 6. However, the portions of Bolza-Schunemann et al. cited by the Examiner describes an automatic inspection system that has "allowable tolerance range for each individual image element by taking an inventory of a large number of printed sheets (for example, proof sheets) which are judged subjectively to be acceptable and establishing an allowable tolerance range for each image element." (Bolza-Schunemann et al., Col. 5, lines 36-51). Claims 1 and 11 deal with sticks and regions in a single image. Therefore, Applicants respectfully submit that the tolerance ranges taught by the cited portions of Bolza-Schunemann et al. are not applicable to Claims 1 and 11. Accordingly, Applicant respectfully submits that Claim 11 is patentable over the combination of Bechelder and Bolza-Schunemann et al. Reconsideration and withdrawal of this rejection is respectfully requested. Claims 12 and depend from Claim 11 and are, therefore, likewise patentable.

Furthermore Applicant respectfully submit that Claim 28, which adds the same limitations as Claim 11 is patentable in its own right for the reasons given above with respect to Claim 28.

Furthermore Applicant respectfully submit that Claim 45, which adds the "means plus function" limitations equivalent to Claim 11 is patentable in its own right for the reasons given above with respect to Claim 11.

Furthermore Applicant respectfully submit that Claim 62, which adds the "means plus function" limitations equivalent to Claim 11 is patentable in its own right for the reasons given above with respect to Claim 11.



### Conclusion

Claims 18 and 52 have been amended. Claims 1-68 remain pending. For the above reasons, Applicants respectfully request allowance of Claims 1-68. Should the Examiner have any questions concerning this response, the Examiner is invited to call the undersigned at (408) 857-0559.

Respectfully submitted,



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Edward S. Mao

December 17, 2007

Date